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### ***Windows PowerShell Get-Help on Cmdlet 'Get-SmbMultichannelConnection'***

**PS:\>Get-HELP Get-SmbMultichannelConnection -Full**

#### **NAME**

Get-SmbMultichannelConnection

#### **SYNOPSIS**

Retrieves the SMB connections made between the SMB client network interfaces and the SMB server network interfaces.

#### **SYNTAX**

```
Get-SmbMultichannelConnection [[-ServerName] <String[]>] [-AsJob] [-CimSession <CimSession[]>]
[-IncludeNotSelected] [-SmbInstance {Default | CSV | SBL | SR}]
[-ThrottleLimit <Int32>] [<CommonParameters>]
```

#### **DESCRIPTION**

The Get-SmbMultichannelConnection cmdlet retrieves the Server Message Block (SMB) connections made between the SMB client network interfaces and the SMB server network interfaces. This cmdlet provides information about how the SMB multi-channel pairs the client and the server network interfaces and which pairs are selected to use for the SMB connections.

## PARAMETERS

### -AsJob [<SwitchParameter>]

Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete.

Required?            false  
Position?            named  
Default value        False  
Accept pipeline input?    False  
Accept wildcard characters?    false

### -CimSession <CimSession[]>

Runs the cmdlet in a remote session or on a remote computer. Enter a computer name or a session object, such as the output of a New-CimSession

(<https://go.microsoft.com/fwlink/?LinkId=227967>)            or

[Get-CimSession](<https://go.microsoft.com/fwlink/?LinkId=227966>) cmdlet. The default is the current session on the local computer.

Required?            false  
Position?            named  
Default value        None  
Accept pipeline input?    False  
Accept wildcard characters?    false

### -IncludeNotSelected [<SwitchParameter>]

Indicates the client and server network interface combinations which are not selected are used by SMB are also enumerated.

Required?            false  
Position?            named  
Default value        False  
Accept pipeline input?    False  
Accept wildcard characters?    false

**-ServerName <String[]>**

Specifies that the multi-channel connections made to the given server are enumerated.

Required? false

Position? 1

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

**-SmbInstance <SmbInstance>**

Specifies the input to this cmdlet. You can use this parameter, or you can pipe the input to this cmdlet.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

**-ThrottleLimit <Int32>**

Specifies the maximum number of concurrent operations that can be established to run the cmdlet. If this parameter is omitted or a value of `0` is entered, then

Windows PowerShell calculates an optimum throttle limit for the cmdlet based on the number of CIM cmdlets that are running on the computer. The throttle limit

applies only to the current cmdlet, not to the session or to the computer.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about\_CommonParameters (<https://go.microsoft.com/fwlink/?LinkId=113216>).

## INPUTS

None

## OUTPUTS

Microsoft.Management.Infrastructure.CimInstance#root/Microsoft/Windows/SMB/MSFT\_SmbMultiChannelConnection

The `Microsoft.Management.Infrastructure.CimInstance` object is a wrapper class that displays Windows Management Instrumentation (WMI) objects. The path after the

pound sign (#) provides the namespace and class name for the underlying WMI object. The MSFT\_SmbMultiChannelConnection object represents a pair of a client and a server network interface.

## NOTES

### ----- Example 1: Get connections -----

PS C:\>Get-SmbMultichannelConnection

Server Name	Selected	Client IP	Server IP	Client Interface Index	Server Interface Index	Client RSS Capable	Client RDMA Capable
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Contoso-SO	True	192.168.102.13	192.168.102.11	15	15	False	True
Contoso-SO	True	192.168.101.13	192.168.101.11	12	12	False	True

Contoso-FS	True	192.168.101.13 192.168.101.22	12	False	True
Contoso-FS	True	192.168.102.13 192.168.102.22	15	False	True
Contoso-FS1	True	192.168.102.13 192.168.102.22	15	False	True
Contoso-FS1	True	192.168.101.13 192.168.101.22	12	False	True

This command retrieves the SMB connections made between the SMB client network interfaces and the SMB server network interfaces.

----- Example 2: Get connections for a specific server -----

PS C:\>Get-SmbMultichannelConnection -ServerName "Contoso-SO"

Server Name	Selected	Client IP	Server IP	Client Interface	Server Interface	Client RSS Capable	Client RDMA Capable
				Index	Index		
Contoso-SO	True	192.168.102.13	192.168.102.11	15	15	False	True
Contoso-SO	True	192.168.101.13	192.168.101.11	12	12	False	True

This command retrieves the SMB connections made between the SMB client network interfaces and the SMB server network interfaces for the SMB server named Contoso-SO.

Example 3: Get properties for connections for a specific server

PS C:\>Get-SmbMultichannelConnection -ServerName "Contoso-SO" | Select -Property \*

```

ClientInterfaceFriendlyName : RDMA2
ClientInterfaceIndex      : 15
ClientIpAddress          : 192.168.102.13
ClientLinkSpeed          : 320000000000
ClientRdmaCapable        : True
ClientRSSCapable         : False
CurrentChannels          : 2
Failed                  : False
FailureCount             : 0
MaxChannels              : 2
Selected                : True

```

ServerInterfaceIndex : 15  
ServerIpAddress : 192.168.102.11  
ServerLinkSpeed : 32000000000  
ServerName : Contoso-SO  
ServerRdmaCapable : True  
ServerRSSCapable : False  
PSCoputerName :  
CimClass : ROOT/Microsoft/Windows/SMB:MSFT\_SmbMultichannelConnection  
CimInstanceProperties : {ClientInterfaceFriendlyName, ClientInterfaceIndex, ClientIpAddress, ClientLinkSpeed...}  
CimSystemProperties : Microsoft.Management.Infrastructure.CimSystemProperties

ClientInterfaceFriendlyName : RDMA1

ClientInterfaceIndex : 12  
ClientIpAddress : 192.168.101.13  
ClientLinkSpeed : 32000000000  
ClientRdmaCapable : True  
ClientRSSCapable : False  
CurrentChannels : 2  
Failed : False  
FailureCount : 0  
MaxChannels : 2  
Selected : True  
ServerInterfaceIndex : 12  
ServerIpAddress : 192.168.101.11  
ServerLinkSpeed : 32000000000  
ServerName : Contoso-SO  
ServerRdmaCapable : True  
ServerRSSCapable : False  
PSCoputerName :  
CimClass : ROOT/Microsoft/Windows/SMB:MSFT\_SmbMultichannelConnection  
CimInstanceProperties : {ClientInterfaceFriendlyName, ClientInterfaceIndex, ClientIpAddress, ClientLinkSpeed...}  
CimSystemProperties : Microsoft.Management.Infrastructure.CimSystemProperties

This command retrieves all of the information about the SMB connections made between the SMB client network interfaces and the SMB server network interfaces for the SMB server named Contoso-SO.

----- Example 4: Get all connections for a specific server -----

```
PS C:\>Get-SmbMultichannelConnection -ServerName "Contoso-SO" -IncludeNotSelected
```

Server Name	Selected	Client IP	Server IP	Client Interface	Server Interface	Client RSS Capable	Client RDMA Capable
				Index	Index		
Contoso-SO	True	192.168.102.13	192.168.102.11	15	15	False	True
Contoso-SO	False	192.168.102.13	192.168.102.11	15	15	True	False
Contoso-SO	True	192.168.101.13	192.168.101.11	12	12	False	True
Contoso-SO	False	192.168.101.13	192.168.101.11	12	12	True	False
Contoso-SO	False	192.168.100.13	192.168.100.11	14	14	False	False
Contoso-SO	False	172.30.182.10	192.168.102.11	32	15	False	False
Contoso-SO	False	172.30.182.10	192.168.102.11	32	15	False	False
Contoso-SO	False	172.30.182.10	192.168.100.11	32	14	False	False
Contoso-SO	False	172.30.182.10	192.168.101.11	32	12	False	False
Contoso-SO	False	172.30.182.10	192.168.101.11	32	12	False	False

This command retrieves the all of the connections made between the SMB client network interfaces and the SMB server network interfaces for the SMB server named Contoso-SO.

## RELATED LINKS

	Online	Version:
<a href="https://learn.microsoft.com/powershell/module/smbshare/get-smbmultichannelconnection?view=windowsserver2022-ps&amp;wt.mc_id=ps-gethelp">https://learn.microsoft.com/powershell/module/smbshare/get-smbmultichannelconnection?view=windowsserver2022-ps&amp;wt.mc_id=ps-gethelp</a>		
Update-SmbMultichannelConnection		